PHENIX

Technical Support 2008

PHENIX
WEEKLY PLANNING

1/10/2008

Don Lynch

Run 8 Task Schedule

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Item	Start	Finish
RPC Tent preparation	On Going	1/18 Gas ready
Next scheduled Maint. Day	1/16	1/16
Lab Holiday (Martin Luther King Day)	1/21	1/21
Install new UPS	~3/15	~3/31
Switch to p+p run	~1/24	~2/2
Mu Trigger FEE Prototype II install	2/15 ?	3/15 ?
Complete new beampipe design	2/29	2/29
End of Run 8	3/1 ?	5/27 ?
End of Run Party	4/4	4/4
Install Gas house UPS's	3/15	6/13
Install HBD West for test run	7/15	9/15

Next Maintenance Day: Jan. 16th

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- PC work (Someone buy it a drink?)
- CM access ladder field fit tests
- Other requests ?

Next Maintenance Access Day Scheduled for 1/16/08:

2008 PHENIX Shutdown Prep

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January-March 2008:

- Run 8 technical support
- RPC factory support
- new beam pipe design completion and review
- CM Crane design review and purchase placement
- Muon Trigger FEE prototype test II
- MMN station 1 & 2 scaffolding design and safety review
- Muon Trigger Rack platform design and review
- RPC3 installation review preparation (support structure, transport and installation fixture design, tunnel vapor barrier modification design, gas mixing and distribution system and piping design).
- VTX, FVTX & NCC technical support

CM Ladder/Stair Shutdown Access

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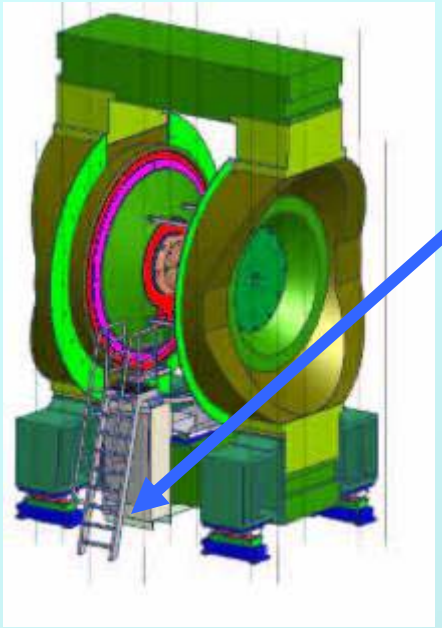
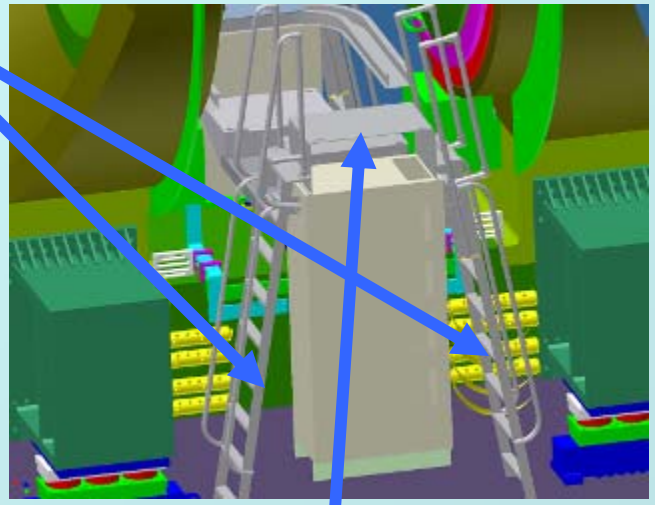
These ladders rec'd





Still waiting for Top of stair landing, in shop, expect ~ 2weeks

Field fit components during next few maintenance accesses; install on west during end of d-Au run access

RPC Factory Support

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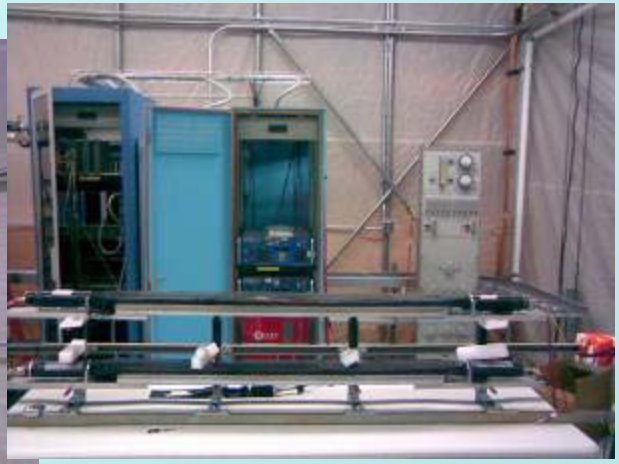

Cosmic Ray Test Stand
Near completion

Safety walkthru Complete
Now need documentation and "bluesheet" system checkout to complete the preparations

Factory nearly ready to begin prototype tests

RPC Factory Support, cont.

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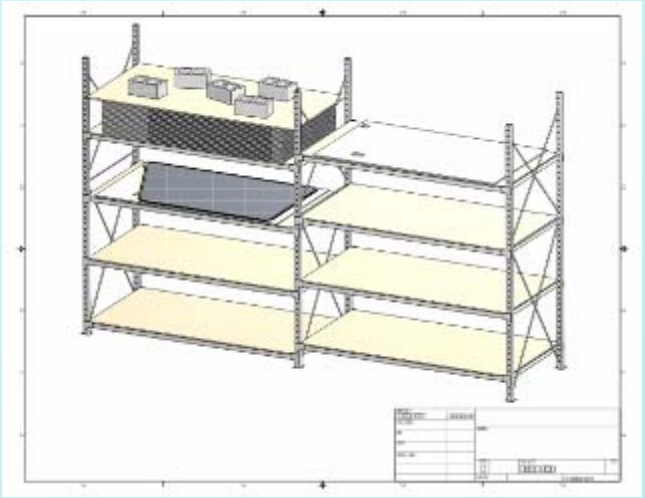
Tent Preparation – Done

Safety systems – Installation complete, mini-blue sheet

Equipment Issues – Need specs for T^3 (Tilting Transport Table) and GMHOS (gap, module and ½ octant storage) racks, then need to fabricate assemble and install.

Work plan – Update for factory procedures

Security –Comply with C-A policy



RPC Factory Issues, cont.

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Area to the west of RPC factory is now re-posted and cordoned with yellow tape as a controlled area. A corridor has been left to access the bathroom. Any activities which will need to traverse the posted area (e.g. delivery of materials, equipment etc. through the roll up doors) will require a work permit

RPC Factory Support

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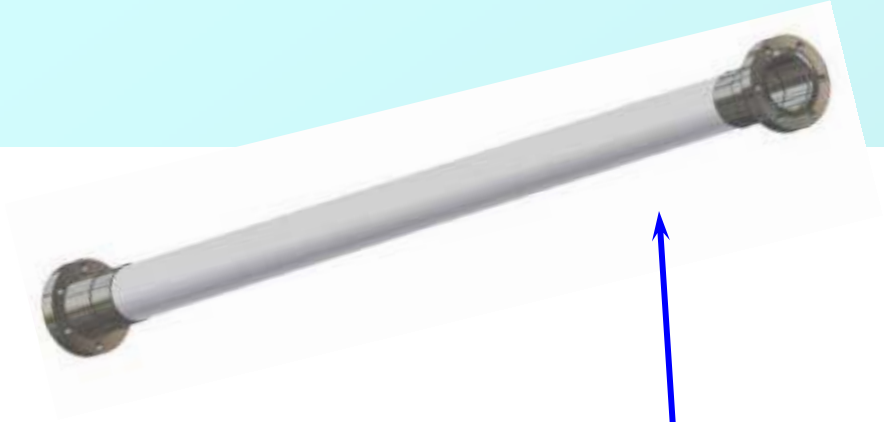
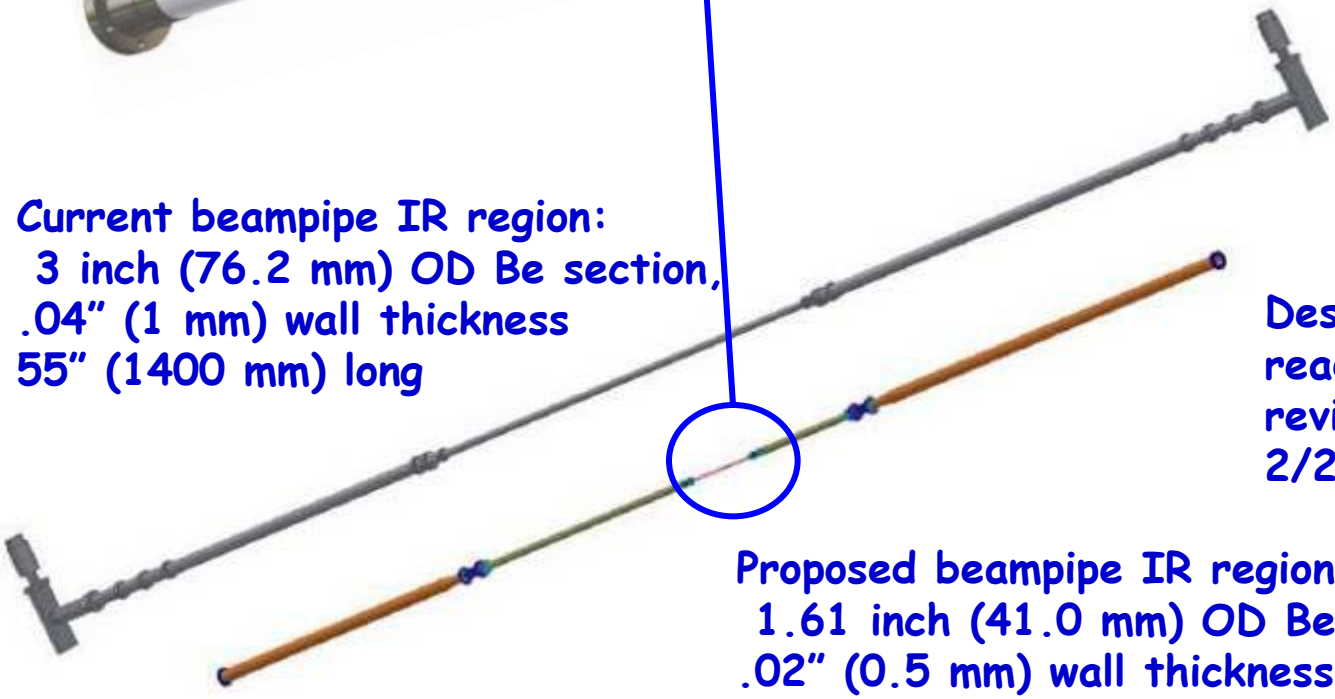
New Beampipe Design & Review



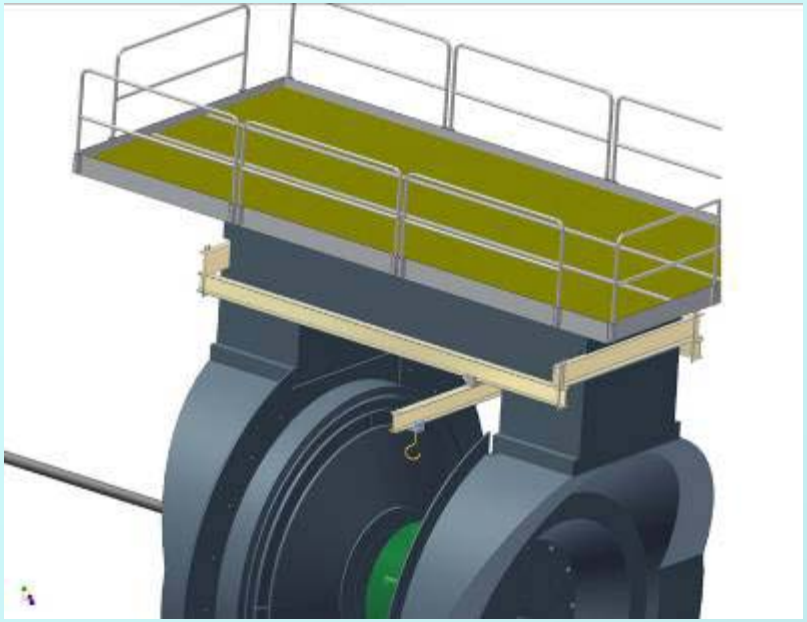


Current beampipe IR region:
3 inch (76.2 mm) OD Be section,
.04" (1 mm) wall thickness
55" (1400 mm) long

Design to be ready for final review by 2/29/08

Proposed beampipe IR region:
1.61 inch (41.0 mm) OD Be section,
.02" (0.5 mm) wall thickness
31.5" (800 mm) long

CM Crane



- Crane Design nearly ready for review
- Uses Gorbel 1-ton capacity Ceiling mounted Bridge Crane, modified to be supported by 2 Steel Channels attached to CM
- Bridge and hoist to be removed for running.

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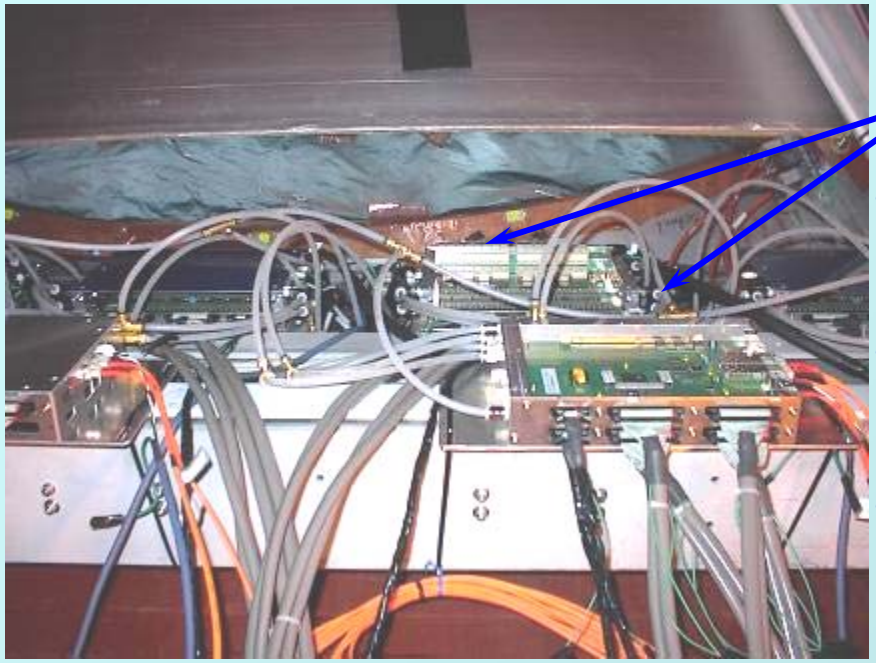
Muon Trigger FEE Prototype Test II



Test this past summer used separate AD and TX electronics.

- New plan combines the two into 1 more compact package.
- Experimental Safety Review is required
- Confined space work permit required.

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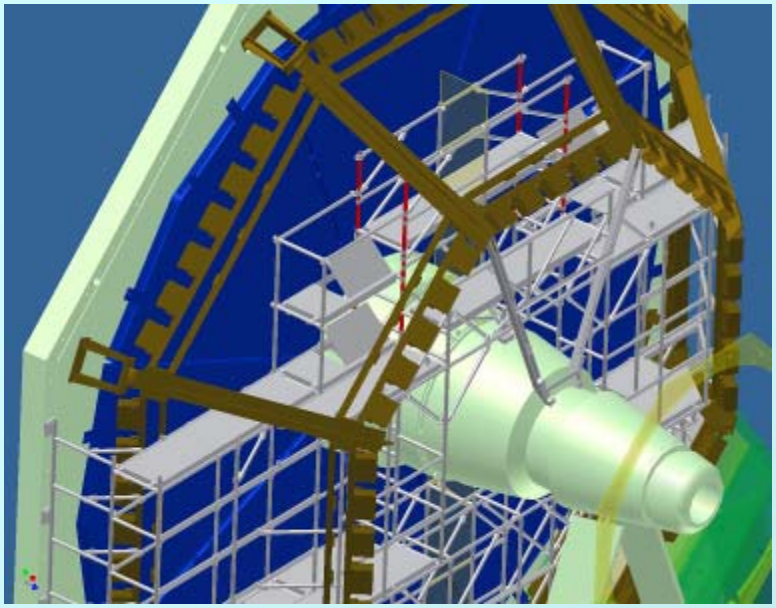
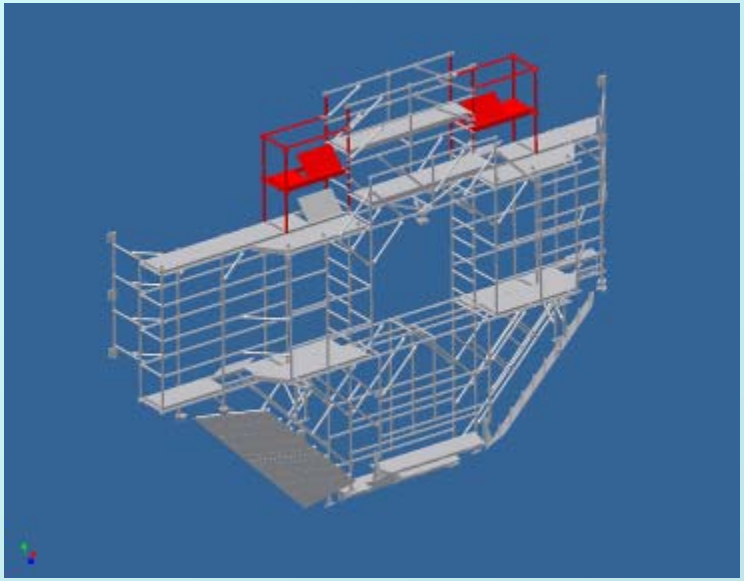
MMN Scaffolding





Existing MMN MuTr scaffolding is being redesigned to be assemble-able with only one lampshade removed and access to all station 2&3 FEE's from lower hatch.

Additional scaffolding to be designed to access all Station 1 North FEE's and lampshade sites adjacent to station 1.

Station 1 North scaffolding to be useable for Station 1 South with minimal modification.

Station 2 & 3 South scaffolding to be addressed later

MMN Scaffolding

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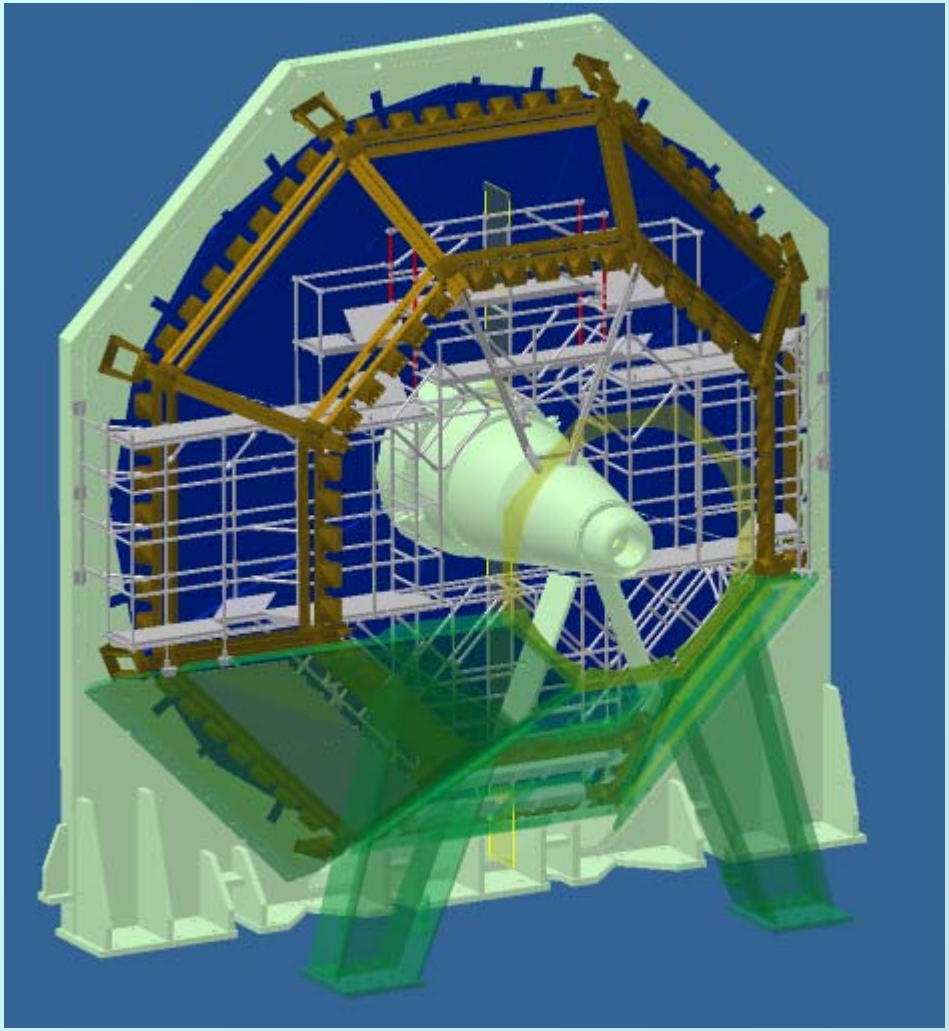
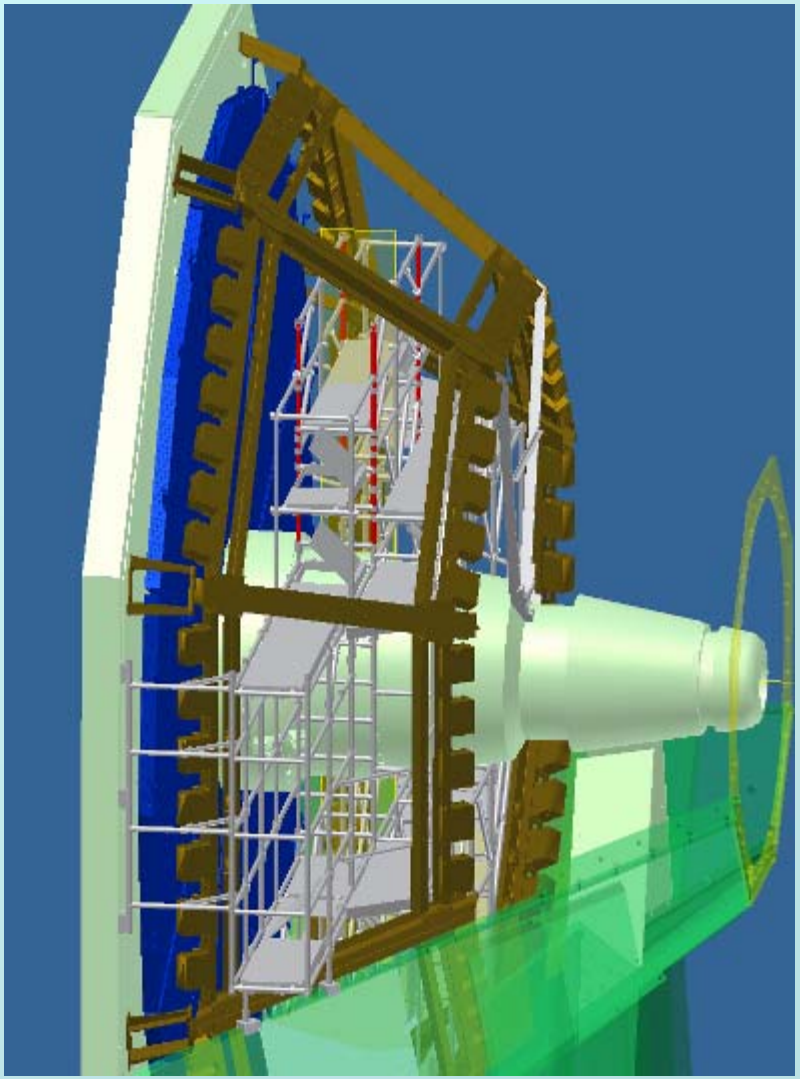
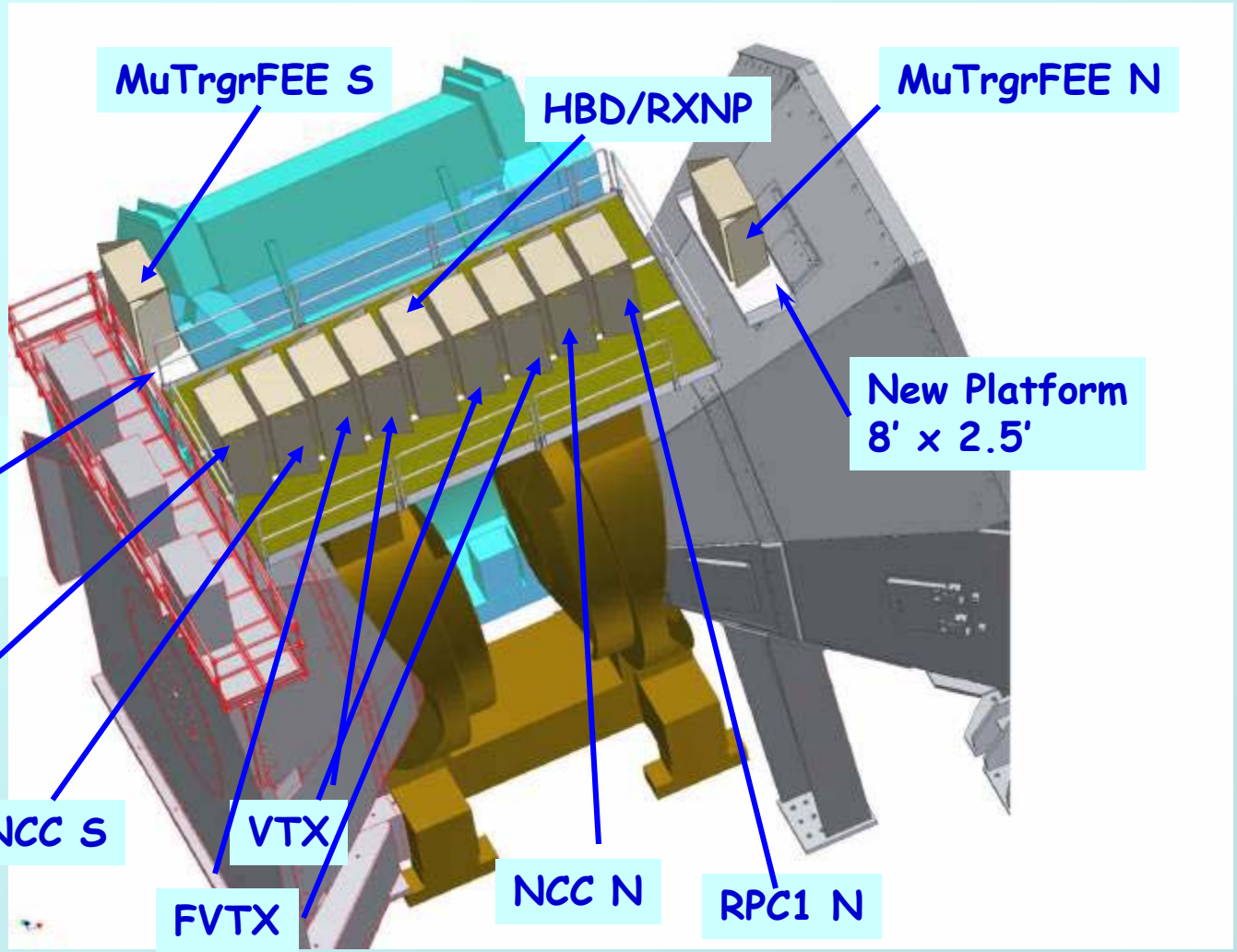




Muon Trigger Rack Platforms



RPC 3 Design Review

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2008 shutdown: install one RPC 3 South and one RPC 2 South prototype half octant: requires installation fixtures, prototype gas system, modifications to tunnel vapor barriers, prototype electronics, cable routing support, and, of course, structural support design

All require both functional and safety reviews (may be combined) by ~June 2008. Assume installation in Aug.-Sept. 2008.

Cu Absorber installation (1 octant on south)

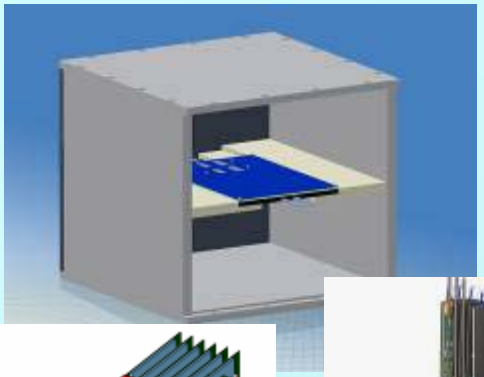
Final review for 2008 prototype installation, interim review for overall project.

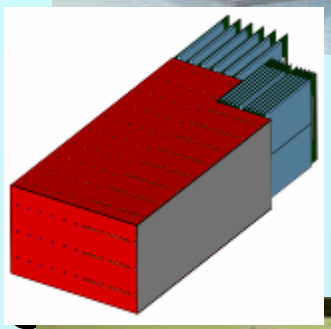
MuTrgr FEE electronics, installation, water & air, safety (final for North, interim for south)

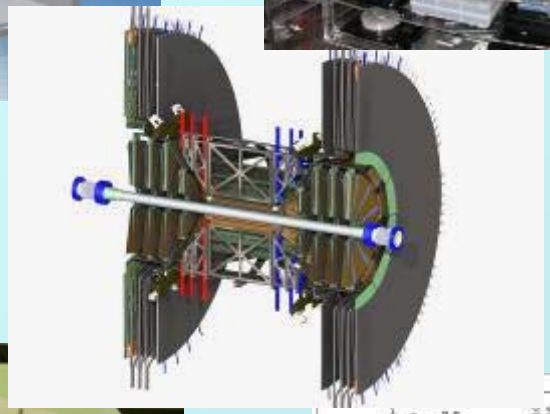
4 months to prepare

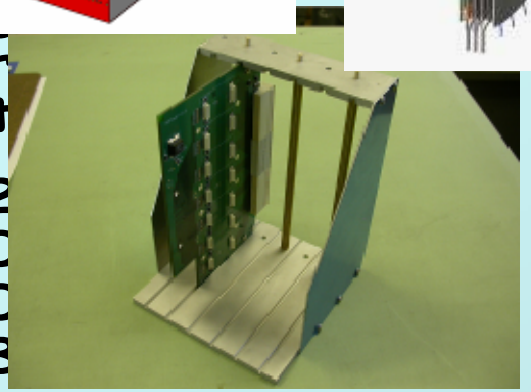
Other Work

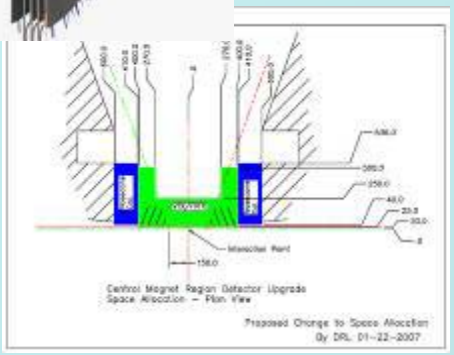
Technical Report 2008











- VTX, FVTX and NCC prototype support
  - Integration
  - Physical and Rack space
  - Infrastructure upgrades

Safety, Security, Etc. :

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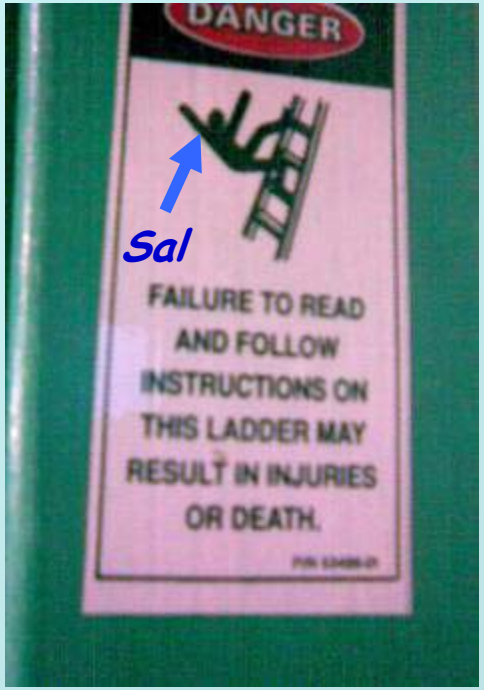
1. Sal's Ladder mishap discussed today.

   Preliminary Conclusions: OSHA discourages using a folding ladder as a single ladder. Such use should be reviewed by safety as a part of work planning. Planners should take care to assign excessive work during limited accesses. New CM access ladders should be implemented as soon as the run is concluded. All at PHENIX who might use ladders should take the BNL portable ladder safety course [TQ-LADDER] (one time, on the web)

2. New Counting house entry door due next week?

3. Training Requirements reviewed. I will send technical staff email indicating individual requirements.



2008 PHENIX Shutdown

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March 2008: Complete Run 8, MUTrigger FEE Prototype tests, Purge flammable gas, open shield wall. RPC Factory work. RPC installation design work.

April 2008: Disassemble Shield wall, remove collars, disconnect EC & move to AH, set up IR for shutdown. Test assembly of MMN scaffolding (in AH). Install Station1 South scaffolding. Install CM access stairs. Prep EC for Shutdown requirements.

May 2008: Install CM Crane. MuTr decapacitations in station1 south. Prep work for MuTrgr electronics platforms north & south. Prep work for RPC prototype installation

June 2008: MuTr decaps, station 1 S & N, PC1 repairs, Inst. station2/3 N scaffolding.

July 2008: Re-Install HBD, RPC prototype gas system, Move shielding for RPC installation, RPC prototype cable routing and support, modify crystal palace and tunnel vapor barrier, fabricate RPC installation fixtures, install MMN Station 2 & 3 scaffolding, TBD subsystem maintenance

August 2008: Install RPC prototypes, install Mu Trigger FEE's in MMS and MMN, Install N&S rack support platforms for Mu Trigger FEE's. Install MMN cooling water and air supply for MMN. TBD prototype tests, TBD infrastructure work

September 2008: Replace tunnel shielding, connect electronics, gas, water and air as necessary for RPC and Mu Trigger FEE,

October 2008: Prepare for run, EC into IR, install collars, build shield wall, etc.

November 2007: blue sheets, white sheets, close wall, start shifts, flam. Gas, physics

5 Year Plan

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2008	Install stations 1& 2 of MuTr FEE upgrades (north), 1 octant Cu absorber (S), 2 half otants RPC2/3 S, infrastructure upgrades & repairs, misc. subsystem work, MMN scaffolding
2009	Scaffolding in MMS, MuTr FEE N stn. 1,2 & 3, MuTr N&S stn. 1,2 & 3 repairs, RPC2 N, RPC3 N, north Cu absorbers, infrastructure upgrades & repairs, misc. subsystem work
2010	Remove HBD & RXNP, remove beampipe, DC West upgrade, VTX barrel, south Cu absorber completed, MuTr FEE stn. 3 S, MuTr stn. 1, 2 & 3 S repairs, infrastructure upgrades & repairs, misc. subsystem work
2011	RPC1 N&S, NCC S, FVTX, infrastructure upgrades & repairs, misc. subsystem work, remove south absorber
2012	NCC N, upgrades contingency & wishlist, infrastructure upgrades & repairs, misc. subsystem work, remove north absorber

** Years refer to the shutdown year and follow the run with the similar number (i.e. work in 2008 is to be done in the shutdown that follows run 8, and so on)*

Where To Find PHENIX Technical Info

Fortes

In

Unitate

Links for the weekly planning meeting slides, long term planning, pictures, videos and other technical info can be found on the web site:

http://www.phenix.bnl.gov/WWW/INTEGRATION/ME&Integration/DRL_SSint-page.htm